



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,710	03/09/2004	Shawn Xiang Wu	B04-006A	2927

7590

01/09/2006

Curtis Castleman
The Gates Corporation
IP Law Dept. 10-A3
1551 Wewatta Street
Denver, CO 80202

EXAMINER

JOHNSON, VICKY A

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/796,710	WU, SHAWN XIANG	
	Examiner	Art Unit	
	Vicky A. Johnson	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 5-8, 10, 13, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3, 5-8, 10, 13, and 16 it is unclear if the limitations in the parenthesis are part of the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al (US 5,610,217) in view of Lee (US 5,135,687).

Yarnell et al disclose a belt comprising: an elastomeric main belt body portion (20), and a sheave contact portion (14) and having a load carrier cord (22) embedded in the belt body portion, the cord comprising a plurality of fibers (col. 4 lines 31-36).

Yarnell et al does not disclose the fibers made up of para-aramid and polyvinylpyrrolidone.

Lee discloses fibers made up of para-aramid and polyvinylpyrrolidone (col. 1 lines 64-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cord of Yarnell et al to include the fibers as taught by Lee in order to improved strength.

Re claim 2, Yarnell et al teach the belt is selected from a multi-V-ribbed belt, a V-belt, and a toothed belt (see Figs 1, 2, 3).

Re claim 3, Lee teaches the para-aramid is poly(p-phenylene terephthalamide) (col. 1 lines 10-13).

Re claims 4, 6-8, and 13, Lee teaches the fibers comprise up to about 30% by weight of polyvinylpyrrolidone based of the total weight of he para-aramid (col. 1 lines 66-68).

Re claim 5, Lee teaches the fibers consist of poly(p-phenylene terephthalamide) and polyvinylpyrrolidone (col. 1 lines 64-68).

Re claim 9, Yarnell et al teach the belt body portion is a cured elastomer composition (col. 5 lines 20-25).

Re claim 10, Yarnell et al teach the elastomer is ethylene alpha olefin (col. 5 lines 48-55).

Re claim 11, Yarnell et al teach the ethylene alpha olefin elastomer is ethylene propylene copolymer (col. 6 lines 1-8).

Re claim 14, Yarnell teaches a river pulley and a driven pulley (inherent).

Re claim 15, Lee teaches to select the fibers consisting of para-aramid and polyvinylpyrrolidone (col. 1 lines 64-68).

Re claim 16, Lee teaches the para-aramid is poly(p-phenylene terephthalamide) (col. 1 lines 10-13).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,358,171	Whitfield	(ethylene alpha olefin)
5,532,059	Lee	(PPD-T, PVP)
6,511,394	Okuno et al	(ethylene alpha olefin)

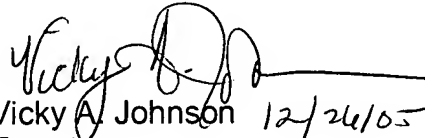
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6217. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vicky A. Johnson 12/26/05
Examiner
Art Unit 3682